

IN THE CLAIMS:

Please CANCEL claims 1-13 without prejudice to or disclaimer of the recited subject matter.

Please ADD new claims 14-22, as follows. For the Examiner's convenience, all claims currently pending in this application have been reproduced below:

14. (New) A load-lock chamber having a substrate transfer path between a first gas atmosphere and a second gas atmosphere, the load-lock chamber comprising:

a first gate valve through which a substrate is transferred between the first gas atmosphere and the load-lock chamber;

a second gate valve through which a substrate is transferred between the second gas atmosphere and the load-lock chamber; and

a gas supply mechanism which supplies the first gas and the second gas to the load-lock chamber,

wherein the gas supply mechanism is arranged to supply the second gas to the load-lock chamber when the first gate valve is closed and the second gate valve is opened during the substrate being transferred between the second atmosphere and the load-lock chamber.

15. (New) A load-lock chamber having a substrate transfer path between a first gas atmosphere and a second gas atmosphere, the load-lock chamber comprising:

a gas supply pipe which supplies the first gas and the second gas to the load-lock chamber; and

a straightening plate provided at an entire upper portion of an interior space within the load-lock chamber to cause the flow of the first gas and the second gas supplied through the gas supply pipe to be uniform.

16. (New) The load-lock chamber according to claim 15, wherein the straightening plate comprises a metal plate with a plurality of perforations formed therein.

17. (New) A substrate processing system, comprising:

a load-lock chamber having a substrate transfer path between a first gas atmosphere and a second gas atmosphere, the load-lock chamber including a first gate valve through which a substrate is transferred between the first gas atmosphere and the load-lock chamber, a second gate valve through which a substrate is transferred between the second gas atmosphere and the load-lock chamber, and a gas supply mechanism which supplies the first gas and the second gas to the load-lock chamber, the gas supply mechanism being arranged to supply the second gas to the load-lock chamber when the first gate valve is closed, and the second gate valve is opened during the substrate being transferred between the second atmosphere and the load-lock chamber; and

a processing device adapted to process the substrate in the first gas atmosphere.

18. (New) An exposure processing system comprising:

a load-lock chamber having a substrate transfer path between a first gas atmosphere and a second gas atmosphere, the load-lock chamber including a first gate valve

through which a substrate is transferred between the first gas atmosphere and the load-lock chamber, a second gate valve through which a substrate is transferred between the second gas atmosphere and the load-lock chamber, and a gas supply mechanism which supplies the first gas and the second gas to the load-lock chamber, the gas supply mechanism being arranged to supply the second gas to the load-lock chamber when the first gate valve is closed and the second gate valve is opened during the substrate being transferred between the second atmosphere and the load-lock chamber; and

an exposure device adapted to expose the substrate in the first gas atmosphere.

19. (New) A device manufacturing method, comprising:

exposing a substrate using an exposure processing system defined in claim 18;

and

developing the exposed substrate using a developer.

20. (New) A substrate processing system comprising:

a load-lock chamber having a substrate transfer path between a first gas atmosphere and a second gas atmosphere, the load-lock chamber including a gas supply pipe which supplies the first gas and the second gas to the load-lock chamber, and a straightening plate provided at an entire upper portion of an interior space within the load-lock chamber to cause the flow of the first gas and the second gas supplied through the gas supply pipe to be uniform; and

a processing device adapted to process the substrate in the first gas atmosphere.

21. (New) An exposure processing system comprising:

a load-lock chamber having a substrate transfer path between a first gas atmosphere and a second gas atmosphere, the load-lock chamber including a gas supply pipe which supplies the first gas and the second gas to the load-lock chamber, and a straightening plate provided at an entire upper portion of an interior space within the load-lock chamber to cause the flow of the first gas and the second gas supplied through the gas supply pipe to be uniform; and

an exposure device adapted to expose the substrate in the first gas atmosphere.

22. (New) A device manufacturing method comprising:

exposing a substrate using an exposure processing system defined in claim 21;

and

developing the exposed substrate using a developer.